DOCUMENT RESUME

ED 259 630 HE 018 511

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TITLE Early Career Outcomes of Baccalaureate Recipients: A Study of Native Four-Year and Transfer Two-Year College Students. ASHE 1985 Annual Meeting Paper.
PUB DATE Mar 85
NOTE 20p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Chicago, IL, March 15-17, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Bachelors Degrees; Career Choice; *College Transfer Students; *Education Work Relationship; *Employment Experience; Graduate Surveys; Higher Education; *Job Satisfaction; Occupational Aspiration; *Two Year Colleges; Vocational Followup
IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

Differences in the job status, stability, and satisfaction of 1,609 recent four-year college graduates with varying lengths of attendance at two-year institutions were studied. Data were obtained on a sample of the participants in the National Longitudinal Study of the High School Class of 1972. A longitudinal design was employed that had controls for the following pre-college characteristics: aptitude, family socioeconomic status, intended occupational status, number of years employed between 1976 and 1979, sex, number of years enrolled in two-year colleges between 1972 and 1976, number of jobs held between 1976 and 1979, and occupational status of job held by respondents in 1979. Respondents also indicated their satisfaction with the challenge of the job, working conditions, opportunities for advancement, pay, security, and fringe benefits. Based on multivariate analysis of covariance, no differences were found in the early career outcome measures between students whose undergraduate preparation was solely in four-year colleges and those whose preparation was at both two- and four-year colleges. (SW)

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Early Career Outcomes of Baccalaureate Recipients: A Study of Native Four-Year and Transfer Two-Year College Students

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HE018 511

(Revised Draft: December, 1984)

Acknowledgment: The authors are indebted to Gerald W. McLaughlin, Patrick T. Terenzini, and two anonymous reviewers for their constructive suggestions.

Running head: EARLY CAREER OUTCOMES

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This paper was presented at the Annual Meeting of the Association for the Study of Higher Education held at the Palmer House Hotel in Chicago, Illinois, March 15-17, 1985. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Abstract

This study explores differences in the job status, stability, and satisfaction of recent four-year college graduates with varying lengths of attendance at two-year institutions. A longitudinal design with controls for salient pre-college characteristics is employed. Results of the multivariate analysis of covariance indicate no differences in the early career outcome measures between students whose undergraduate preparation was solely in four-year colleges and those whose preparation was at both two- and four-year colleges. The administrative and research implications of these results are discussed.

Early Career Outcomes of Baccalaureate Recipients: A Study of Native Four-Year and Transfer Two-Year College Students

Career performance of college graduates is an important area of scholarly inquiry given the historical role of career development in American higher education and the increasing vocational orientation of contemporary college students (Bowen, 1977; Roemer, 1981). Extant findings tend to support the general conclusion that college attendance is positively associated with such career attributes as job status (Sewell and Hauser, 1975), job satisfaction (Juster, 1975), and job stability (Richards, 1984).

But there are many paths to college graduation and the consequences of alternative paths for subsequent career performance have not been explored in-depth. The traditional path of initial attendance at and ultimate graduation from four-year institutions has become much less prevalent with the phenomenal growth of two-year college enrollments throughout the past two decades. Two-year college enrollments have burgeoned from 600,000 students at 663 institutions in 1960 to almost five million students at more than 1,200 institutions today (Ford Foundation, 1984).

Astin (1977) concluded that "perhaps the most significant impact of attending a community college is on the student's persistence and implementation of career plans" (p. 234). He found that students attending two-year colleges were less likely

to achieve their career plans and explained that "this negative effect may be attributed entirely to the reduced chance of completing a baccalaureate" (Astin, 1977, p. 161). While the academic persistence difficulties of two-year college students has been aptly documented in the research literature (see, for example, Robertshaw and Wolfle, 1983), the question remains as to whether the subsequent career activities of students who enrolled initially in two-year colleges and persist to completion of the baccalaureate differ from the career activities of baccalaureate recipients who enrolled initially and persisted in four-year institutions. This topic is the principal focus of the present study.

Specifically, the present study explores potential differences in the job stability, status, and satisfaction of three groups of baccalaureate recipients with varying levels of attendance at two-year colleges during their undergraduate education. Previous studies of college effects and the performance of students after graduation have been criticized because of their reliance on cross-sectional research designs and their failure to control for important pre-college student characteristics (Astin, 1977; Bowen, 1977; Pascarella, in press). The present study thus employs a longitudinal design with controls for several pre-college characteristics that have been shown to differentiate students at two-year and four-year colleges (e.g., aptitude, family socioeconomic status).

Research Procedures

Sample

The sample for this study was obtained from participants in the National Longitudinal Study (NLS) of the High School Class of 1972. The NLS was a two-stage stratified national probability sample of 22,652 seniors from 1,318 public and private high schools, and was designed to provide information on the personal, educational, and career development of adolescents during their transition from high school to the adult world. Students were surveyed initially in their senior year of high school (1972) and subsequently in 1973, 1974, 1976, and 1979. Response rates across the five individual surveys exceeded 90 percent (Riccobono, Henderson, Burkheimer, Place, and Levinsohn, 1981).

A total of 4,130 NLS participants reported completion of baccalaureate requirements between 1976 and 1979, with the majority (n = 2,579, 62%) receiving their bachelor's degree in 1976. This study was based on the responses of 1,609 baccalaureate recipients in 1976 who provided complete data on all variables described below.

Variables

The following eight measures were obtained directly from the NLS data set for all 1,609 sample members: (1) Academic Ability--academic ability measured in 1972, (2) Family Socioeconomic Status--socioeconomic status of students' family in 1972, (3) Intended Occupational Status--occupational status of

the job to which students aspired in 1972, (4) Years Employed--number of years that respondents were employed between 1976 and 1979, (5) Sex--students' sex, (6) College Enrollment--number of years that students were enrolled in two-year colleges between 1972 and 1976, (7) Job Stability--number of jobs held by respondents between 1976 and 1979, and (8) Job Status--occupational status of job held by respondents in 1979. Riccobono et al. (1981) provide a complete description of these and other measures in the NLS data set.

Two additional measures of respondents' satisfaction with their jobs in 1979 were obtained from factor analysis results of a set of twelve items in the 1979 NLS data set. Respondents were asked to indicate their relative satisfaction with twelve different aspects of their current jobs. The factor analysis results (available upon request to the senior author) indicated two underlying dimensions. The first dimension was the respondents' Intrinsic Job Satisfaction (e.g., satisfaction with importance and challenge of the job, general working conditions, pride and respect derived from the job, and opportunities for promotion and advancement); the second was respondents' Extrinsic Job Satisfaction (e.g., satisfaction with pay, security, and fringe benefits of the job). Table 1 provides a brief description of all ten variables included in this study.

Insert Table 1 about here

Analysis

A 2 x 3 multivariate analysis of covariance (MANCOVA) design was used to analyze the data. The covariates in the analysis were Academic Ability, Family Socioeconomic Status, Intended Occupational Status, and Years Employed. All covariates have been shown to differentiate between students at two-year and four-year colleges and/or to be related to the dependent variables described below (Astin, 1977). The two independent variables were Sex (females, males) and College Enrollment (none, one year, two or three years of attendance at a two-year college). The four dependent variables were Job Stability, Job Status, Intrinsic Job Satisfaction, and Extrinsic Job Satisfaction. The purposes of this analysis were to determine if there were differences in the early career outcomes (i.e., dependent variables) of baccalaureate recipients who had varying levels of attendance at two-year colleges (when variation associated with selected pre-college characteristics was statistically removed) and whether such potential differences were consistent for males and females.

Results and Discussion

The overall test of the covariates was significant ($F = 19.13$, $df = 16/4876$, $p < .001$) and inspection of the univariate F-values indicated a statistically significant relationship ($df = 4/1599$, $p < .001$) between the covariates and each of the

dependent variables: Job Stability (F = 36.96), Job Status (F = 14.91), Intrinsic Job Satisfaction (F = 16.40), and Extrinsic Job Satisfaction (F = 14.11). The regression slopes of each dependent variable on the covariates were essentially the same (F = 1.16, df = 80/6220, n.s.) and significantly different from zero (F = 20.10, df = 16/4815, p < .001). The scores of respondents on the dependent variables were then adjusted using the unstandardized regression coefficients presented in Table 2 to control for variation associated with the covariates.

Insert Table 2 about here

Table 3 presents the group means for the covariates and the adjusted group means for the dependent variables. The adjusted mean scores for the dependent variables are the scores that would be expected or predicted for each group if the covariate means for the group were the same as the grand mean for each covariate (Huitema, 1980). The MANCOVA results indicated that neither the test for the College Enrollment main effect (F = 0.87, df = 8/3192) nor the interaction term (College Enrollment X Sex: F = 0.54, df = 8/3192) were statistically significant (p < .05). These results indicate that there are no differences in the Job Stability, Job Status, Intrinsic Job Satisfaction, or Extrinsic Job Satisfaction of baccalaureate recipients with varying levels of attendance at two-year colleges when variation associated with

the covariates is statistically controlled, and that this overall similarity is consistent for males and females.

Insert Table 3 about here

Astin (1977) concluded that enrollment in two-year institutions "impedes changes that are normally a consequence of college attendance" (p.233). His findings were based on changes in students' attitudes and behaviors during the college years and thus represent short-term developmental patterns. Included among the short-term detrimental consequences of enrollment in two-year institutions were the tendency of two-year college students to exhibit less increase than four-year college students in hedonism, interpersonal self-esteem, and personal autonomy; to endorse more strongly traditional views of the role of women in society and the belief that monetary gain is the primary benefit of a college education; and to be less likely to attain leadership positions and to achieve their educational and career objectives (Astin, 1977).

But what are the implications of Astin's (1977) findings for two-year college students who subsequently transfer to four-year institutions and persist through completion of baccalaureate requirements? Are the short-term detrimental effects of their initial enrollment in two-year colleges immutable, and are they forever disadvantaged as a result of their prior decision to

begin their undergraduate preparation in these institutions? Affirmative responses to these questions would pose serious problems for a society committed to the goal that students entering postsecondary education through two-year colleges have the same opportunities as those entering four-year institutions for educational success, personal and intellectual development, and the attainment of career plans given comparable levels of ability and motivation.

The findings of this study clearly suggest that the potential short-term detrimental effects of two-year college attendance reported by Astin (1977), if they exist, are not immutable and that students are not forever disadvantaged by their initial decision to begin their undergraduate preparation in two-year colleges in terms of their subsequent career behaviors. This conclusion is supported by the finding that there are no significant differences in the job stability, status, and satisfaction of (male and female) transfer two-year college and native four-year college baccalaureate recipients during the early years of their careers in the adult work world when variation associated with their initial levels of academic ability, family socioeconomic status, and intended occupational status is statistically controlled. While two-year colleges may serve a "cooling-out" function for some students, it is apparent from the findings of this study that capable high school graduates who enroll in two-year colleges and persist to

completion of baccalaureate requirements have an equal probability for occupational success and satisfaction as their peers whose entire undergraduate preparation is in four-year institutions.

While potential students, their families, and proponents of two-year colleges may find some comfort in the above, the findings of this study in no way obviate extant findings in the literature regarding the acute attrition phenomenon experienced by two-year college students or Astin's (1977) findings concerning short-term detrimental effects incurred by these students during their undergraduate preparation at two-year institutions. There are decided differences in two-year and four-year college students in terms of their academic ability and family socioeconomic status at the time they begin their undergraduate preparation and such initial differences, which were statistically controlled in this study, may assist or impede their likelihood of occupational success and satisfaction following completion of baccalaureate requirements (see Tables 2 and 3). For example, native four-year college students in this study have higher academic ability and family socioeconomic status scores than transfer two-year college students. Such initial differences, in conjunction with the part-time and commuting nature of two-year college students, suggest that the atypical developmental pattern of these students may be attributed more to the inherent characteristics of individuals

attending two-year institutions than to the failure of this important sector of the higher education community to provide a rich and complete set of learning experiences though their curricula and other campus activities.

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Table 1

Variable Names, Types, Definitions, and Sources

Variable Name	Variable Type in Analysis	Definition	NLS Survey Year
Academic Ability	Covariate	Linear composite of student scores on the NLS vocabulary, reading, and mathematics aptitude tests	1972
Family Socieconomic Status	Covariate	Linear composite of student responses concerning level of father's education, mother's education, father's occupation, and family income	1972
Intended Occupational Status	Covariate	Occupational status* of the job to which students aspired as high school seniors	1972
Years Employed	Covariate	Number of years that respondents were employed between 1976 and 1979	1976 & 1979
Sex	Independent	Sex of student	1972
College Enrollment	Independent	Number of years between 1972 and 1976 that students were enrolled in two-year colleges	1972, 1973, 1974 & 1976
Job Stability	Dependent	Number of jobs that respondents held between 1976 and 1979	1976 & 1979
Job Status	Dependent	Occupational status* of job held by respondents in 1979	1979
Intrinsic Job Satisfaction	Dependent	Satisfaction with importance and challenge, general working conditions, pride and respect, and opportunities for promotion and advancement afforded in the job held by respondents in 1979	1979
Extrinsic Job Satisfaction	Dependent	Satisfaction with the job held by respondents in 1979 in terms of its pay, fringe benefits, and security	1979

*The occupational status of jobs reported by NLS respondents is based on the scales developed by Duncan (1961) as adjusted to the 1970 Census occupational code by Hauser and Featherman (1977).

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Table 2

Regression Coefficients of Covariates

Covariates	Dependent Variables			
	Job Stability	Job Status	Intrinsic Job Satisfaction	Extrinsic Job Satisfaction
Academic Ability:				
Unstandardized	0.01*	0.18*	0.00	0.00
Standardized	0.08*	0.11*	-0.02	-0.01
Family Socioeconomic Status:				
Unstandardized	0.06	0.67	-0.06*	-0.01
Standardized	0.03	0.03	-0.07*	-0.02
Intended Occupational Status:				
Unstandardized	0.01	0.13*	0.00	0.00
Standardized	0.02	0.14*	0.02	-0.04
Years Employed:				
Unstandardized	0.48*	1.68*	-0.12*	-0.11*
Standardized	0.29*	0.09*	-0.19*	-0.18*

*$p < .01$

Table 3

Group Means[a] and Standard Deviations[b]

Variables	Years of Attendance at Two-year Colleges					
	None		One year		Two or three years	
	Males (n=652)	Females (n=735)	Males (n=33)	Females (n=34)	Males (n=79)	Females (n=76)
Covariates:						
Academic Ability	42.51 (9.64)	41.32 (10.61)	37.21 (10.31)	38.08 (12.56)	38.93 (9.58)	34.62 (12.03)
Family Socioeconomic Status	0.48 (0.69)	0.44 (0.71)	0.38 (0.63)	0.25 (0.76)	0.33 (0.57)	0.25 (0.68)
Intended Job Status	80.17 (17.71)	69.29 (18.52)	79.16 (23.21)	70.99 (18.26)	76.41 (18.81)	67.49 (15.27)
Years Employed	3.34 (1.06)	3.44 (0.88)	3.55 (0.71)	3.44 (0.82)	3.52 (0.83)	3.28 (1.01)
Dependent Variables:						
Job Stability	3.84 (1.53)	4.00 (1.63)	4.16 (1.67)	4.21 (1.80)	3.97 (1.34)	3.85 (1.52)
Job Status	65.00 (20.31)	61.77 (15.17)	62.50 (18.78)	59.15 (14.66)	63.98 (17.97)	65.65 (14.52)
Intrinsic Job Satisfaction	1.88 (0.59)	1.95 (0.60)	1.98 (0.65)	2.00 (0.51)	1.87 (0.54)	1.86 (0.62)
Extrinsic Job Satisfaction	1.98 (0.59)	2.02 (0.57)	1.98 (0.66)	1.95 (0.52)	2.00 (0.53)	1.98 (0.66)

[a] The group means for the dependent variables are adjusted for scores on the covariates.

[b] Standard deviations are presented in parentheses.

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